RELATION BETWEEN SOCIAL CLASS AND PROMISING EXPERIENCES IN TEN-YEAR-OLD BOYS

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ABSTRACT

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By

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The present study was undertaken to investigate possible differences in past experiences with promises between children of different social classes as a result of different values and child rearing practices in the different classes.

There were three groups of 20 ten-year-old boys from class 1 & 2, from class 4, and class 5 as defined by the Hollingshead and Redlich two-factor index of social class. Controls for age, educational level, and verbal IQ were employed. A structured, open-ended interview was conducted by the author with each child. The child was asked to remember as many promises made to him and by him that he could. It was expected that since class 1 & 2 children probably had more positive experiences with promises they would remember more. Each child was also asked to estimate the period of time that passed between making each promise and its fulfillment or nonfulfillment. This information was used to see if class 1 & 2

remembered promises with longer delay times which might be related to their superior ability to delay gratification. The children were asked whether each promise was kept, broken, or expected to be kept. It was thought that class 1 & 2 children would remember more promises kept to them than the other children.

The data were analyzed using t tests of differences between groups.

The results indicate that: finding

(1) Class 5 children remember the most number of promises.

(2) Class 5 children remember more kept promises than class 1 & 2 and class 4.

(3) Class 1 & 2 childreh remember promises with longer delay times than class 4 or class 5 children.

(4) All children remembered about the same absolute number of broken promises, indicating that better techniques have to be devised to verify the children's reports.

It was concluded that there were differences in remembered experiences with promises between children of different social classes. It was theorized that these differences are caused by different child

rearing practices and values in the classes. There may be related differences in ability to delay gratification between children of different classes. Future research is necessary to clarify and explore these possible relationships.

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By

Marc Gershowitz

A THESIS

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DEDICATION

To a man-boy whose life

was an unfulfilled promise

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To my parents for giving me the chance . . .

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REVIEW OF THE LITERATURE

Theoretical Background of the Study

Freud (1959) describes the revolution in the mind which leads to the reality principle supplanting the pleasure principle. The reality principle develops when the attempt to find satisfaction through hallucination (day-dreaming and night dreams) does not lead to the expected gratification. This leads to disappointment. This forces the mind to form a real conception of the world and leads it to exert itself to alter the world. The creation of the reality principle leads to thought which makes it possible for the mind to tolerate the delay between stimulus and discharge. One mode of thinking, fantasy, kept apart from the reality principle. Freud sees the predisposition to neurosis to lie in the fact that instincts which remain for a longer time under the influence of the pleasure principle (sexual instincts) are more vulnerable to return to domination by the pleasure principle after they become reality based. The reality principle does not get rid of the pleasure principle. It just gives up a momentary pleasure in order to get a greater pleasure later on.

Hartmann (1956) said that the reality principle includes the postponement of gratification and temporary tolerance of unpleasantness. The reality principle restricts the pleasure principle only to secure greater pleasure in the future.

Singer (1955) describes Freud's key step in the change from primary to secondary process thinking as the ability to delay gratification. He describes the process as taking place by a "gradual neutralization of libidinal energy through identification and incorporation of parental figures, transformation of mobile energies into bound cathexes . . . and formation of the ego" (p. 259).

According to Rapaport (1950) "thinking explores the possible pathways of action to find the one of least resistance, least danger and greatest directness, while preserving almost intact the energy necessary for motor action" (p. 169). He relates Freud's concept of thinking to its biologically adaptive function.

Singer speculates on the effects of the development of delay of gratification. In families where strict child rearing patterns are practiced, children learn to accept delay in order to reduce their tensions. In delaying and imitating adults they resort to fantasy gratification. They create fantasies of fulfillment which satisfy them until the real gratification is achieved. This behavior is reinforced and becomes valued. It is adaptive to the extent that it frees man from dependence on immediate stimulation. In excess, it

can lead to excessive ambivalence and loss of contact with reality. This can happen in families where the child rearing practices are over-rigid. An opportunity for identification with benign and loving adults in early childhood may be essential for the development of capacities for motor inhibition and planful fantasy. To the extent that social class affects family patterns it may be a factor that influences the delay of gratification patterns in children. The middle-class family has routines, family unity at meals and emphasizes savings and education.

This provides the child with a setting which fosters the ability to tolerate temporary delay. The consistency of the patterns leads to the belief that satisfaction will come eventually. In the lower-class family, parents are less available (particularly fathers), meals are haphazard with no assurance of food and consequently the value of delay is less clear.

The development of the ability to delay gratification is a dynamic process which takes place throughout childhood. It is a fantasy substitution of an image of the gratification as opposed to the actual gratification which is achieved in the future. One would expect there to be differences among the social classes in their ability to delay gratifications because of different abilities to produce actual gratification which support and reinforce the fantasies of future fulfillment.

Differences Between Value Systems

The literature on the differences between the social classes deals with the differential ability to delay gratification as a function of differential value systems in the two classes. Value systems affect the way the child is brought up. The child's perceptions of the future reflect the rewards and punishments he has received for future-oriented actions.

Watson (1957) showed that middle-class children are more inclined to work for long-term, ideal goals while lower-class children are more inclined to work for immediate rewards. Davis (1943) felt that lower-class children had less chance than middle-class children to learn that sacrificing immediate rewards for future goals can be rewarding. They develop the philosophy of getting what they can while they can. The middle-class child's life is more predictable, financially more secure and long-range goals are more consistently rewarded and encouraged. He develops much more positive feelings about the future. Brim and Forer (1956) found a significant correlation between length of future planning and occupational status of the father. Occupational status of the father determines whom he associates with and there are strong group pressures to adopt the values of his peers.

Duvall (1946) explained that lower-class parents' values are "traditional" in that they want their children to be neat and clean,

to obey and respect adults and to please adults. Middle-class parents' values are "developmental" in that they want their children to love and confide in their parents, to be happy, to share and cooperate and to be healthy and well. "Traditional" and "developmental" orientations as well as different values placed on the future help explain the differences in child rearing practices in the two classes. Middle-class children are encouraged to sacrifice immediate satisfactions for future rewards by being encouraged to put faith in the future, by receiving more rewards and punishments in the future and by having the chance to see highly satisfying results that come from delaying. Lower-class children are encouraged to get what they can while they can. Their everyday survival demands this orientation.

Differences in Child Rearing Practices

Mischel (1961b) found that children from Trinidad, where impulsive behavior is prevalent, were more likely to choose an immediate reward than children in Granada, where people are more willing to work for bigger rewards. Also children who were living in homes where the father was absent were more likely to choose immediate rewards. He attributed this phenomenon to decreased stability in the household which leads to lack of trust and also leads to unwillingness to work for future rewards. Littman (1957) found that

middle-class fathers have a better relationship with more warmth towards their children. They spend more leisure time with their children. Lower-class homes, where the father is not as close to his children, are similar to Mischel's fatherless homes. Bronfenbremer (1958) said middle-class mothers want their husbands to support their children, especially their sons, while lower-class mothers want their husbands to be more constraining than supportive. This helps explain the difference in the father's attitude toward his children in the middle-class and lower-class.

Mischel (1961b) found that there was no relation between absence or distance of the father and choice of immediate reward in children in the eleven to fourteen year old age group. Since there was a difference at an earlier age, he speculated that the positive influences outside the family may have counteracted the feelings of mistrust he developed in dealing with the members of his family.

Epstein's (1963) middle-class children have more pleasant memories of early childhood while lower-class children remember angry feelings and aggressive and sexual behavior. This relates to Sears' (1957) finding that middle-class mothers are more permissive and lower-class mothers are more punitive, particularly in toilet training. They repress the child's exploratory, sexual and aggressive behavior. They use more corporal punishment. Middle-class parents try to stimulate guilt and use shame. Lower-class children try to

avoid punishment by being sneaky while middle-class children try to conform to their parents' wishes.

White (1957) and Littman (1957) also found middle-class mothers more tolerant of aggression in their children. White found that middle-class mothers were more permissive in toilet training, more responsive to their baby's crying, and carried through less often when they told their child to do something. They also rely more heavily on experts, other mothers and friends as their sources of information on child rearing practices.

Douvan (1956) reported Erikson's (1950) findings that middle-class society stresses personal attainment and puts pressure on the child to achieve and, Davis's (1944) finding that the middle-class uses anxiety as a reinforcer for achievement. Douvan said the middle-class child is urged on to individual achievement, compared by his parents to his peers and taught to respond to symbolic as well as material rewards. He develops a strong, internalized desire for accomplishment and responds consistently to material and non-material rewards. The lower-class child is not pressed for individual achievement as early or as consistently, so his motivation is more materially oriented.

Melgor (1967) supports these findings. She says that middle-class children are more productive, creative, and emotionally stable and have more effective defense mechanisms than lower-class children.

They show more feelings of restraint and control as well as feelings of insecurity. Lower-class children have greater difficulty controlling and stabilizing their impulses and have poor adaptive behavior. Their hostile environment makes them dependent and aggressive. They are more psychopathic than the neurotic middle-class children.

Bronfenbrenner (1958) reviewed the literature for the twenty-five years before his paper. He found little overall change in the quality of parent-child relations over that period of time in the two classes. The values are the same. All the studies have dealt with changes in technique that have come about to reach these same goals. Lower-class parents use physical punishment of a disobedient child if his behavior leads to destruction of property. They ignore the act if it does not lead to material damage. Middle-class parents punish on the basis of their perception of the child's intent. They will punish a furious outburst on the part of the child if they see it as a loss of self-control but they will ignore the same behavior if they see it as an emotional release. Middle-class parents are more acceptant and egalitarian. Lower-class parents are oriented to maintining order and obedience.

Middle-class child rearing practices are future oriented in their encouragement of delaying gratification, striving for achievement and planning for the future. Absence of the father, more

punitive discipline than rewards, more encouragement of conformity, less tolerance of aggression, and less push towards achievement lead the lower-class child to be less individualistic, less able to control impulses and less able to see future rewards as coming about as a result of their own actions. They tend to feel less in control of their own destiny. Repressive child rearing practices limit fantasy activity and do not allow the child to contemplate and wait for future gratification.

Differences in Ability to Delay Gratification

Differences in child rearing practices such as the role of the father in discipline, the closeness of the father to his children and the things the child is rewarded and punished for, lead to very different temporal orientations in children in the two classes. These child rearing practices may help explain the numerous studies which have found differences in ability to delay gratification between the two classes.

Schneider and Lysgaard (1953), Rotter (1954), Mahrer (1956), Mischel (1958, 1961a, 1961b, 1961c), Brim and Forer (1956), Mischel and Metzner (1962), and Back and Gergen (1963) have all dealt with the concept of ability to delay gratification in terms of the child's

expectation that the delayed reward will occur. None of the above studies dealt with promises. The child's expectation of reward were conceptualized mainly in terms of "trust" or the belief that the agent who promised the delayed reward will supply it. It is important to note that the child puts great faith in promises that are made to him. The way these promises are handled has a great effect on the child's ability to delay rewards. The promises the young child makes are not as important to the development of his ability to delay reward. As his models keep their promises to him his own promises become more important and he makes them more seriously. He also makes more realistic promises.

Kleinberg (1968) relates the development of delaying ability to the degree to which images of personal events are realistic to the child and the degree to which he is preoccupied with future rather than present events. Mischel and Metzner (1962) found a major shift in delaying ability between the ages of eight and nine. Kleinberg attributed this change to the increased sense of reality the future takes on to the child at this time. He is not specific as to the cause of the change. One could speculate that at this age the child's egocentricity is waning. He is more aware of others and more aware that he has to start making choices that affect his future.

Fraisse (1963) said that there is no future without a desire for something different and an awareness of the possibility of getting

it. Bleuler (1951), Blos (1962), and Lewin (1942, 1951) have stressed the child's inability to conceptualize the difference between unobtainable wishes and realizable goals. Erikson (1950) said childhood was a time to develop a sense of industry. Piaget (1958) followed this up by saying that childhood is a time for concrete exploration of the surrounding environment. The child thinks in terms of "concrete operations" which structure the child's thoughts and make the future nothing more than the prolongation of actions or operations already structured in the present. In preadolescence the child begins to think abstractly of the future.

Ginsberg, Ginsberg, Axelrad and Herma (1951) said that children escape frustration through fantasy. The more the child is frustrated the more he fantasized his future as an adult. These fantasies, however, should not be confused with the more mature, realistic contemplation of the future that leads to the ability to delay gratification.

Dollard and Miller (1950) emphasize the inhibition of responses to internal drives and external cues to give the cue producing responses time to occur. The thought process is what leads to the ability to delay gratification.

Differences in ability to delay gratification are a function of differences in ability to trust others and differences in faith in the future. The middle-class child is more trusting and has more

faith in the future so he should have a greater ability to delay gratification.

Ability to Delay Gratification and Promises

It is now clear that different value systems lead to different child rearing practices which lead to differential ability to delay gratification. It is now necessary to explore the relationship between the ability to delay gratification and a promise.

A promise is a verbal statement about the future which a person makes, that is meaningful to another person or other persons. It is a verbal commitment to redeem one's word in the future. It is a fantasy substitution for actual behavior at the time of the promise. Promises help in the development of "trust" in the Erikson (1950) sense. A promise is meaningful if the person trusts the promiser to keep his word.

There is a commonality in the motivation on the part of the promiser and the promisee. The promise is a way of alleviating frustration or discomfort. The promisee's frustration is alleviated when the promiser substitutes a verbal image for the actual immediate fulfillment. The image may be of a threat or of a reward. The promise, however, alleviates the temporary vacuum of uncertainty about some point in the future. When the promiser is in a situation where the

promisee is frustrated because of uncertainty or an uncomfortable situation, the promiser may feel frustrated also and may desire to alleviate the promisee's difficulty. He may not be able to provide immediate relief so he uses the promise as an image of relief sometime in the future. Sometimes the promiser may desire to give relief but is unable to carry through his commitment even in the future. He then has to break his promise.

Distinctions should be made between promises of reward and promises of punishment. Distinctions should also be made between promises that are kept and promises that are broken. A person may promise a reward sometime in the future. An example is a father who promises his son he will get him a bicycle for his birthday. A person may use a promise to threaten. An example is a mother who promises her son he will get a licking when his father gets home. These promises set up different expectations in the child. In the reward situation he will eagerly await the future. In the threat situation he will hope the fulfillment never comes. If the reward promise is broken the child will be very disappointed and his faith in promises will be shaken. The effect of the broken promise will depend on how important that promise was to the child. If a promise of punishment is broken the child may feel ambivalent. He is relieved that the threat has passed but next time he may doubt the word of the promiser even if the next promise is one of reward. A person will not lose

faith in the promiser because of one broken promise, especially if he has had positive past experience with that person's promises, but over a period of time broken promises lead to expectations of other broken promises. In this study no attempt will be made to separate important from unimportant promises. Only promises of rewards that are kept or broken will be used. Threats or promises of punishment are promises but they have different dynamics than promises of rewards and will not be dealt with.

Promises of reward are probably the most instrumental type of promise related to the ability to delay gratification. With a promise of reward the child will wait because the gratification is pleasure producing. With a threat he will not be gratified after his wait. Children who have a great deal of positive past experience with promises of rewards will probably have a positive outlook on the future. They will be able to extend their thoughts realistically far into the future. Children who have had negative experience with promises of rewards will try to get as much immediate gratification as they can because they will not have much faith in the future. They may not be able to extend their thoughts realistically into the future.

Middle-class children have a greater ability to delay gratification than lower-class children. One might speculate that positive experiences with reward promises and faith in the future would

contribute to the difference in ability to delay. It has been shown that middle-class families are more future oriented in their values and their child rearing practices than lower-class families.

Positive past experiences with reward promises should lead the child to remember more promises, remember promises that were made over a greater period of time and have a greater expectation of fulfillment than lower-class children. Whether the child's remembrances reflect his past experience accurately will be dealt with in the method section. One might expect quantitative differences in the types of rewards that are rpomised. Middle-class parents may promise to buy more expensive things than lower-class parents. Middle-class parents may have more time for their children and they may take them more places. There is the question of whether a promise to buy a bicycle is the same as the promise to buy an ice cream cone. When the promises are classified into different types these issues will be important.

The outcome of the promises that are made to the child may affect the types of promises the child makes. Schlessinger (1961) hypothesized that there were differences in the promises of adults and the promises of children. He labeled these two types of promises primary and secondary. His formulation for promises is similar to Freud's formulation for thoughts. Primary promises are made to repair a disagreement with another person. The child who makes a primary

promise does not think of the long-term consequences of his promise. He uses the promise to bring himself back into harmony with another person. He does not see keeping his promise as important as relieving the tension he feels as a result of his transgression. An example is promising to be good next time if he is not punished this time. A secondary promise is the mature promise to redeem one's word in the future that adults make. The more positive experience a child has with secondary promises the more his own promises may resemble secondary promises. Ten-year-olds can delay gratifications fairly well. One might speculate that they may use mostly secondary promises by this time. In the present study no effort has been made to distinguish between primary and secondary promises. No effort has been made to see if the promises the children remember are accurate representations of his past experience with promises. There is no way to tell how much fantasy material, wish-fulfillment and differential memory capacities are affecting the child's promises. Once the elements of past positive experience with reward promises and the effects of these experiences on future behavior are identified the components of promises can be analyzed in detail in other studies.

STATEMENT OF HYPOTHESES

The present study is concerned with identifying the components of past experience with reward promises as remembered by the child, and the implications of this experience for future promising situations. The following hypotheses were tested:

Hypothesis 1: Middle-class children can remember more promises made to them than lower-class children (class 1 & 2 > 4 > 5).

Hypothesis 2: Middle-class children remember making more promises than lower-class children (class 1 & 2 > 4 > 5).

Hypothesis 3: Middle-class children remember being promised things over a longer period of time than lower-class children (class 1 & 2 > 4 > 5).

Hypothesis 4: Middle-class children remember promising things over a longer period of time than lower-class children (class 1 & 2 > 4 > 5).

Hypothesis 5: Middle-class children remember more promises being kept to them than lower-class children (class 1 & 2 > 4 > 5).

Hypothesis 6: Middle-class children remember keeping more promises than lower-class children (class 1 & 2 > 4 > 5).

PROCEDURE

Subjects

The total sample of 60 children was composed of three groups: 20 children of class 1 & 2, 20 children of class 4, and 20 children of class 5, based on the Hollingshead and Redlich two factor index of social class (1965).

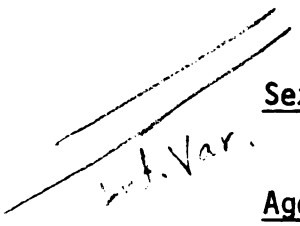
In class 1 & 2 homes the head of the household is the manager of a business, a professor, or other professional. Class 1 & 2 corresponds to what has been called elsewhere the upper- and upper-middle class.

In class 4 homes the head of the household is a sales person, white-collar worker, or owner of a small business. Class 4 corresponds to what has been called elsewhere the middle-middle and lower-middle class.

In class 5 homes the head of the household is usually a semi-skilled or unskilled worker. A large number of the fathers of class 5 children never finished high school. Class 5 corresponds to what has been called elsewhere the lower-class.

Twenty children were chosen from each of two schools in Lansing, Michigan, and twenty children were chosen from a school in Okemos, Michigan. The schools were selected because they are physically near each other. While the Lansing schools have predominantly class 4 and class 5 children, the Okemos school has predominantly class 1 and 2 children. The children were chosen by the examination of record cards of all the fourth grade children in each school for the occupational and educational level of their parents. The first twenty who were of the desired class were selected to participate in the study. Classes 1 & 2 were grouped together in order to find twenty children for this "class." The hypotheses did not test for or expect a difference between these two groups. There is precedent for this "merging" technique in the studies of Hollingshead and Redlich.

There are no studies on differences in experience with promises in the literature. Since previous research on ability to delay gratification has shown the following variables to be important the following controls were provided for in this study:



Sex: Only white, male children were included in the groups.

Age: Only children between the ages of 9.6 and 10.6 were used.

Educational Level: Only children who were in the fourth grade were used.

Intelligence Level: A correlation was run between each child's vocabulary stanine on the Stanford Achievement Test and the number of promises he remembered. The correlation was negligible ($r = 0.06$).

Family Constellation: Only children from families where both parents were alive and living at home were used. The mean number of siblings for class 1 & 2 was 2.1, for class 4 children 2.9, and for class 5 children 2.5.

Interview

Each subject was asked 8 questions in a structured interview. Before the question period, each child was asked what a promise meant to him. This developed rapport and assured that all children meant the same thing when they spoke of a promise.

It was necessary to find out how many promises the child remembered, whether the promise was kept, broken, or expected what the latency of each promise was, and how long ago the promise was made.

Interview Questions

Procedure: The eight questions were presented in two parts.

Part 1: In the first part the child was asked to remember as many promises as he could. This part can be considered the free association phase. To facilitate the child's memory the following questions were used:

1. "I would like you to tell me as many promises as you can remember that your father made to you."

2. "I would like you to tell me as many promises as you can remember that your mother made to you."

3. "I would like you to tell me as many promises as you can remember that your teacher made to you."

4. "I would like you to tell me as many promises as you can remember that your friends made to you."

5. "I would like you to tell me as many promises as you can remember that you made to your father."

6. "I would like you to tell me as many promises as you remember that you made to your mother."

7. "I would like you to tell me as many promises as you can remember that you made to your teacher."

8. "I would like you to tell me as many promises as you can remember that you made to your friends."

Scoring: The total number of promises made by each promiser was counted. The total number of promises of each of the following types that were made to and by each child were counted. The types of promises were (1) giving, (2) permission, (3) going to, (4) taking to, and (5) doing.

1. Giving promises included promises of giving some physical object some time in the future. It includes promises to buy something and promises to give gifts. It does not include promises of giving one's word. An example of a giving promise is to give someone a toy for his birthday.

2. Permission promises include promises where the promiser has some power over the promisee and agrees to let the promisee do something he would not or could not do without the promiser's sanction. An example is letting one's child stay up and watch the late movie.

3. Going to promises carry the implication of equality. Both parties want to go equally. An example of going to promise is to promise to go to play ball with a friend.

4. Taking to promises imply that the promiser is going somewhere and agrees to take the promisee along. An example of a taking to promise is a mother promising to take her son to the zoo.

5. Doing promises are promises of intentionality. The promiser commits himself to do something sometime in the future. He may be referring to a commitment to do a favor. He may be referring to a commitment to carry out a previously made promise. An example is promising to wash the dishes.

Part 2: This phase may be termed the inquiry. The child was told that the examiner would like to go over all the promises again. The examiner asked the child two questions for each promise that the child mentioned in the free association.

1. "Was the promise kept?"

2. "How long passed between when the promise was made and when it was kept (broken, made and still expected to be kept)?"

Scoring: The frequency of kept, broken, and expected promises was counted. The number of days between the time the promise was made and when the outcome became clear to the child was the measure of latency for each promise. How long ago the promise was made was recorded in days and used for comparison purposes.

Interview Rationale

The preliminary question was used to develop rapport and to make sure each child has a realistic notion of what a promise is. If the child did not explain the notion of a promise clearly he was asked to tell more, or explain more about it until it was clear to the interviewer that the child understood what a promise was.

The first parts of questions 1 through 4 were designed to get a quantitative measure of the richness of the promise experience. It is realized that memory, fantasy life and wish-fulfillments may be involved in the number of promises that are remembered. The purpose was to get a picture of the total number of incidents the child can remember as promises. Qualitative differences between the promises were ignored at this point. The total number of promises is partly a measure of promises, including all the fantasy, memory and wish-fulfillment elements and partly a measure of verbal fluency. It was hoped that there would be equal variances of promises within the

social classes and that one class is not more verbally fluent than the other.

The first parts of questions 5 through 8 were designed to get a quantitative measure of the number of promises the child makes. In this study no attempt was made to determine the child's intent, whether his promises are primary or secondary. The intent of a child's primary promise is to stop the promisee from being displeased with him. An example is a promise to be good. It is not realistic, in that the child can't be good forever, but it shows an attempt at reconciliation with the promisee. Secondary promises are more mature and are intended as commitments to redeem one's word in the future. One would expect that since ten year olds can delay gratification they probably also make mostly secondary promises. This has not been proved, so some of the children's promises may not only differ by type but also by intent. There might have been differences in who makes the most promises to the child as opposed to who the child promises the most things to. There might have been differences in the types of promises made to the child as opposed to the types of promises the child makes. These differences, if they exist, might have been related to differences between child and adults and the types of promises they are able to make rather than to social class differences. The types of promises, as well as the sheer numbers, had to be known in order to compare differences in types of promises that

are made. Differences in types of promises that are made were dealt with in the inquiry section.

Part two of questions 1 through 4 dealt with the child's expectations of the promises that are made to him. Promises that have not yet been fulfilled are particularly vulnerable to the child's fantasy life. Differences in the number of promises that were reported broken should have turned up if there were differences of a gross nature in past experience with promises. If promises made to lower-class children were often broken this fact should have turned up. Most children may have a tendency to remember fulfillments rather than disappointments so even though there may be actual differences in the number of broken promises made to lower-class children it might not have shown up.

One might have expected the child to come up with few broken promises in answer to part two of questions 5 through 8. If the child made mostly secondary promises he would probably report the ones he has kept. If he is still making primary promises he might not be as concerned about keeping his commitment and might report more broken promises. It is not possible to tell if the broken promises are a function of his experience or if they are a reflection of the fact that the child is still making primary promises.

The inquiry was designed to measure differences in delay times of the promises that were made. One would expect that middle-class

children with their greater ability to delay gratification would be able to tolerate longer intervals between the promise and its fulfillment. The child may remember selectively, promises made to him that do not reflect the actual median latency of the promises that are typically made to him.

The length of time into the past promises are remembered is a memory measure. If there were differences on this measure, the child would have been talking about promises of different time periods. This difference would distort comparisons between the number and kinds of promises they remember. Some children went far into the past to think of promises. Some children only talked about promises that were just recently made to them.

Method of Analysis

Hypotheses 1 and 2 that middle-class children remember more promises made to them and by them than lower-class children were examined by the use of t tests between the groups. In case of differences in the total number of promises made, the data was further broken down into how many promises were made by and to each of the four promising agents--father, mother, teacher, and friends. The number of promises made by and to each promising agent was then compared using a t test.

Hypotheses 3 and 4 that middle-class children are promised and promise more things over a longer period of time than lower-class children was tested using data collected in the inquiry. The child's mean latency scores were determined and compared between groups with t tests.

Hypotheses 5 and 6 that middle-class children have greater expectations that a promise made to them will be kept and that they keep more promises were examined by counting the number of kept, expected and broken promises made to and by each child. T-tests of the comparisons of the mean number of kept, broken and expected promises reported in each social group were compared.

RESULTS

Number of Promises Remembered

The results for hypotheses 1 & 2 are diametrically opposed to those predicted. In addition, inspection of Table 1 shows that the differences between children of classes 1 & 2 and 5 are significant at the .01 level of confidence. The differences between children of classes 1 & 2 and 4 are not significant.

Delay Times of Promises

The results for hypotheses 3 and 4, as presented in Table 2, are in agreement with the predictions. Therefore, one can conclude that class 1 & 2 children remember promises with longer delay times than class 4 or class 5 children and class 4 children remember promises with longer delay times than class 5 children.

TABLE 1

COMPARISONS OF MEANS OF TOTAL NUMBER OF PROMISES MADE TO THE CHILDREN

Promises Made	Social Class			T-Values		
	1 & 2	4	5	1 & 2 vs. 4	4 vs. 5	1 & 2 vs. 5
To the child	7.55	7.65	17.7	-0.11	-4.80**	-5.30**
s.d.	3.35	2.52	8.3			
By the child	6.75	7.45	14.15	-0.59	-3.19**	-4.11**
s.d.	6.46	5.06	7.27			

**p < .01

TABLE 2

RECALL OF PROMISES OVER TIME

Promises Made	Social Class			T-Values		
	1 & 2	4	5	1 & 2 vs. 4	4 vs. 5	1 & 2 vs. 5
To the child	151	18.1	12.2	4.81**	3.47**	5.04**
s.d.	528	19.7	16.8			
By the child	81.6	48.6	7.6	2.81**	6.8**	7.39**
s.d.	183	110	10.1			

**p < .01

Number of Promises Kept

The results for hypotheses 5 and 6 are diametrically opposed to the predictions made. Class 5 children remembered significantly more kept promises than class 1 & 2 and class 4 children. There were no significant differences in the number of kept promises between class 1 & 2 and class 4 children. Inspection of Table 3 shows that differences between class 1 & 2 and class 4 are in the opposite direction of the prediction.

When the child's promises are compared, as Table 3 shows, class 5 children remembered significantly more kept promises than class 4 children but not class 1 & 2 children. Differences between classes 4 and 5 are in the opposite direction from prediction but not significant.

Additional Results

Because of the unexpected results for hypotheses 1 and 2 and hypotheses 5 and 6, further analyses were undertaken to try to help explain the results.

According to hypotheses 1 and 2 class 1 & 2 children should remember the most promises. They remembered the fewest. One wondered if any type of promises were remembered more frequently by class 5

TABLE 3

COMPARISONS OF KEPT PROMISES

Promises that were kept	Social Class			T-Values		
	1 & 2	4	5	1 & 2 vs. 4	4 vs. 5	1 & 2 vs. 5
To the child	5.45	5.05	14.8	0.02	-3.38**	-6.21**
s.d.	2.2	2.9	7			
By the child	5.5	7	12	-1.12	-1.36	-2.5**
s.d.	2.6	2.4	2.5			

**p < .01

children. Accordingly, t-tests were carried out between groups comparing each type of promise separately. As one can see in Table 4 (see Appendix), there were significant differences in the number of "giving," and "permission" promises between children of class 1 & 2 and class 5. There were significant differences in the number of "giving" and "going to" promises between children of class 4 and class 5. There were significant differences in the number of "going to" promises between children of class 1 & 2 and class 4.

Inspection of Table 4 indicates that there are no clear patterns of differentiation in types of promises although the greatest differences in promises to the child were along the lines of being given things and being given permission. Promises of doing where the promiser commits himself to some behavior with the child did not differentiate the groups thus indicating that class 5 children remember being given more things, possibly to compensate for not actually being given as much, but none of the children remembered significantly different numbers of promises of intentionality.

Table 5 shows significant differences in the number of "going to" promises by children of class 1 & 2 and 4 with class 1 & 2 children remembering more. There were also significant differences in the number of "giving," "permission," and "doing" or "intentionality" promises between class 1 & 2 and class 5 with class 5 children

remembering more in each case. There were significantly more "doing" or "intentionality" promises in class 5 children than class 4.

Further inspection of Table 5 indicates a more generalized phenomenon that class 5 children remember more promises of all types except "going to" promises than class 1 & 2 children. Class 5 children remember more "going to" and "doing" promises than class 4 children but not more "giving" promises. Class 4 children remember more "giving" and "going to" promises but not more "doing" promises than class 1 & 2 children.

Another statistical test which seemed to be appropriate was to see if one particular promiser was making most of the promises, thereby badly skewing the data, or if children remembered about the same number of promises made by each promiser. All promises of all the promisers was correlated with the total number of verbal responses (all promises to and by the child) and the total number of promises made by each other promiser. A Table of Intercorrelations (see Appendix) was used to see how well the number of promises made by each promiser correlated with one another. All the promisers intercorrelated significantly thus indicating that no single promiser accounted for most of the variance. The number of promises of the father has the highest correlation with the number of verbal responses and the number of promises to the child. Mother has the next highest correlation with the number of promises to the child, then friends,

then teacher. The promises of the father, for a ten-year-old boy, may be the most important to him. They are probably the ones he remembers best. Since the children were asked about their father's promises first it is not clear if there are order effects here.

Since hypotheses 5 and 6 that class 1 & 2 children remembered more kept promises met with opposite results one wondered about memories of promises expected to be kept and broken promises. Accordingly, t-tests were used to compare the groups on these measures. Class 5 children expected to keep significantly more of their own promises in the future than class 1 & 2 or class 4 children. On the other hand, all children expected all promises made to them that were not yet fulfilled to be kept. None of the children reported many broken promises but among those that did there were no significant differences in the numbers reported between groups. (See Appendix for results.)

DISCUSSION

The findings generally support the hypotheses that there are differences in past experiences that children of different social classes remember. One-third of the sample came from class 1 & 2 homes where the head of the household is a manager of a business, a professor or other professional. They include what has been called elsewhere the upper- and upper-middle classes. One-third of the children came from class 4 homes where the head of the household is a sales person, white-collar worker, or owner of a small business. They constitute a large majority of the middle-middle and lower-middle class. One-third of the children came from class 5 homes where the head of the household is usually a semiskilled or unskilled worker. A large number of the fathers of class 5 never finish out high school. They are members of what has been termed the "lower-class." It is possible that the differences in value orientations of the classes account for differences in child rearing practices including experiences with promises. Mischel (1962) found that between ages 8 and 9 middle-class children (class 1 & 2) experience a great increase in their ability to delay gratification. One might expect

that by 10 promises are taken for granted as nothing special to be remembered. Class 5 children may have had more frustrating experiences with promises which, if true, could relate to their lesser ability to delay gratification.

Differences in Number of Promises Remembered

Since class 1 & 2 children have the greatest ability to delay gratification, hypotheses 1 and 2 predicted that they would remember the most number of promises. In fact, they remembered the least. Thus, the equation: ability to remember more promises indicates greater ability to delay gratification is invalid. One may ask: "why do class 5 children remember so many more promises?" One possibility is that class 5 children use the promise as a fantasy substitution for actual gratification. Singer (1955) speculated that children develop fantasies of rewards to lessen the frustration of not receiving immediate gratifications. This is normal and not to be confused with the findings of Ginsberg, Ginsberg, Axlerad and Herma (1951) that children use fantasy to escape unpleasant reality. On the basis of Ginsberg et al. it might be speculated that class 5 children would use fantasy as an escape. Children of classes 1 & 2 would tend to use it as a healthy mode of adaptation to reality as described by Singer.

Another possible explanation of why class 5 children remembered many more promises is related to the Davis (1944) finding that middle-class children are taught to respond to symbolic as well as material rewards. Lower-class children are much more oriented to get what they can while they can. One might expect them to remember more promises of material rewards. This in fact is the case. Class 5 children remembered significantly more promises of being given something. They also remembered more promises that they would go somewhere than children of either class 1 & 2 or class 4. Interestingly enough, despite remembering many more promises, the children of class 5 did not remember a significantly different number of permission or intentionality promises than class 4 or class 1 & 2 children. It is possible that most of the variance in the number of promises remembered can be accounted for by the fact that being able to tolerate delay of a giving promise requires a less mature fantasy life. If that were so giving and going to promises may be more primitive types of promises which 10-year-old boys of class 5 are still preoccupied with while other children have outgrown preoccupation with them.

Class 5 children may remember more promises for another reason. A class 1 & 2 child may remember a father's promise to get him a bicycle. A class 5 child may remember a father's promise to buy him an ice cream cone. A class 1 & 2 child might not even consider this a

promise important enough to be remembered. What is promised in each instance may be important.

Class 5 children may remember making more giving, permission, and doing promises than class 1 & 2 children as a reflection of their feeling of importance about not being able to give. They substitute fantasied promises for actual fulfillments. Class 5 children remember more going to and doing promises than class 4 children possibly reflecting a desire to outdo their more favored class peers (class 4) in an area they can compete, namely, in giving their word. Class 4 children remember more going to and giving promises than class 1 & 2 children perhaps reflecting their fantasy substitution of promises for less actual ability to keep their promises. In any case, there are definite differences in numbers of promises made by the children but the significance of these results is still highly speculative.

Differences in Delay Times

Duvall (1946) found that middle-class children are encouraged to sacrifice immediate satisfactions for future rewards while lower-class children are encouraged to get what they can while they can. With this difference in temporal orientation one might expect there to be differences in the amount of time delay, before gratification, the children of the different classes will tolerate. In fact, the

differences in mean delay time between the children of classes 1 & 2, 4 and 5 were significant as predicted by hypotheses 3 and 4. Class 1 & 2 children reported promises made to and by them with longer delay times. Therefore, it seems that quantitative differences in past experience with promises do not seem to be as crucial as qualitative differences in determining time orientation of the children. In other words, remembering a large number of promises does not seem to relate to ability to delay gratification. Remembering a relatively large number of promises with longer delay times may be related to the ability to delay gratification.

Differences in the Number of Promises Kept, Broken, and Expected to be Kept

The fifth and sixth hypotheses were that class 1 & 2 children would remember more promises made to and by them that were kept. Class 5 children actually remembered more promises kept (to and by them). There are several possible explanations similar to those explaining why class 5 children remember more promises altogether. It could be that class 1 & 2 and class 4 children have more promises kept to them but they have a greater tendency to verbalize important promises only. Another related explanation is that there are differences within the categories of promises made to class 1 & 2, 4 and 5

children. Class 1 & 2 and 4 children may have forgotten many promises because they took them for granted.

It is interesting that there were significant differences in the number of expected promises made by the children, but not in the number of broken promises made by them. Class 5 children may expect their promises to be kept as a denial of reality. Perhaps all children seem to be denying reality with respect to the number of broken promises. None of the children reported many broken promises.

Suggestions for Future Research

Promises seem to be universal phenomena. Qualitative differences in past experience with promises seems to be most closely related to differences in values, child rearing practices, and ability to delay gratification. This study has not quantified the relationship between past experiences with promises and inferred ability to delay gratification. What remains to be done is to see if promises are a behavioral mechanism by which children learn to accept delayed gratification and what the mechanism is. This would clearly be useful for parents and teachers to know. Several methodological improvements in the present design may be useful for future researchers.

Interpersonal variables such as interviewer rapport, the child's feelings about being interviewed and the fact that the setting

in which the child was interviewed all may affect the number of promises remembered. These types of variables should be examined in any study of differences in promising experiences.

Differences in delay times should be verified by interviewing the other person in the promise diad, and by setting up situations where the child is actually made a promise with a certain delay time and seeing how he reacts.

More specific questioning is necessary to separate promises of different time periods. One simple way of doing this would be to ask the child to remember all the promises made to him today, then yesterday, then last week, etc., separately.

Another suggested improvement in the interview would be to ask the child to talk about his experience with kept, broken, and expected promises separately. The frequency of expected and broken promises was too small to make any good generalizations. Techniques are necessary to get the child to remember more of them even though he may not be inclined to do so.

The types of promises made to the child and differences in the distribution within each type of promise are very important. The affective component in the promising situation may also be intruded. How does the child feel about a specific promise? How important does he perceive it to be? How important do others perceive his to be?

These questions can only be answered by actual interviewing of the promiser and the promisee, and by seeing how they react in actual promise situations.

SUMMARY AND CONCLUSIONS

This study was concerned with the relationship between children's experience with promises to social class and to the ability to delay gratification.

There were three groups of 20 children each from class 1 & 2, class 4, and class 5 based on the Hollingshead and Redlich two factor index of social class. Controls for sex, educational level, and verbal I.Q. were used. The children were individually interviewed by means of a structured interview, designed to elicit the following types of information: 1) the number of promises they could remember that were made to them, 2) the number of promises they could remember that were made by them, 3) the delay time of each promise made to them, 4) the delay time of each promise made by them, 5) whether each promise made to them was kept, broken, or still expected to be kept, and 6) whether each promise made by them was kept, broken, or still expected to be kept. The information was used to test the following hypotheses:

Hypothesis 1: Class 1 & 2 children remember more promises made to them than class 4 or class 5 children.

Hypothesis 2: Class 1 & 2 children remember making more promises than class 4 or class 5 children.

Hypothesis 3: Class 1 & 2 children remember promises made to them with longer delay times than class 4 or class 5 children.

Hypothesis 4: Class 1 & 2 children remember promises made by them with longer delay times than class 4 or class 5 children.

Hypothesis 5: Class 1 & 2 children remember more promises made to them that were kept than class 4 or class 5 children.

Hypothesis 6: Class 1 & 2 children remember making more promises that they keep than class 4 or class 5 children.

Result

The results obtained were diametrically opposed to those predicted by hypotheses 1 and 2 and hypotheses 5 and 6. The results generally agreed with hypotheses 3 and 4. The results of hypotheses 1 and 2 and hypotheses 5 and 6 were explained in terms of class 5 children possibly using promises as substitutes for actual gratifications. They may, therefore, remember more of them. Hypotheses 3 and 4 seem most related to the ability to delay gratification. A

child who remembers promises with longer delay times also is a child who has a greater inferred ability to delay gratification.

The main conclusion of the study is that there are differences in past remembered experiences with promises between children of different social classes. It may be further concluded that since differences in values and differences in child rearing practices have been shown to be related to ability to delay gratification it is possible that experience with promises is an important behavioral parameter in the development of the ability to delay gratification.

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APPENDIX

TABLE 4

DIFFERENCES BETWEEN THE CLASSES AS TO TYPES OF PROMISES MADE TO THE CHILDREN

Type of Promise	Social Class			T-Value		
	1 & 2	4	5	1 & 2 vs. 4	4 vs. 5	1 & 2 vs. 5
Giving	1.7	2.55	5.05	-1.5	-2.5**	-4.2**
Standard Dev.	1.26	2.21	3.6			
Permission	0.85	2.0	3.65	-1.2	-1.3	-3.5**
Standard Dev.	0.93	3.56	3.74			
Going to	1.00	0.40	2.50	-1.9*	-3.2**	-2.0
Standard Dev.	1.15	0.20	2.46			
Taking to	1.65	1.55	1.75	-0.23	-1.03	-0.06
Standard Dev.	1.13	1.19	2.83			
Doing	2.45	2.05	3.50	-0.54	-1.63	-1.10
Standard Dev.	2.18	1.73	2.72			

**$p < 0.01$
*$p < 0.05$

TABLE 6

INTERCORRELATIONS OF THE NUMBER OF PROMISES MADE BY ALL OF THE PROMISERS TO ALL OF THE CHILDREN

	Number of Verb.	Number of Pro.	F	M	T	Fr.
Total number of verb. resp.		.90	.70	.51	.61	.81
Total number of pro. to child			.84	.74	.59	.66
Number of promises by father				.43	.37	.26
Number of promises by mother					.39	.26
Number of promises by teacher						.27
Number of promises by friends						--

$r_{.01} = .325$

$r_{.05} = .25$

TABLE 7

INTERCORRELATIONS OF THE NUMBER OF PROMISES MADE BY ALL OF THE CHILDREN TO ALL OF THE PROMISEES

	Number of Verb.	Number of Pro.	F	M	T	Fr.
Total Number of verbal resp.		.88	.65	.56	.60	.69
Total Number of pro. by child			.82	.82	.67	.86
Number of promises to father				.47	.36	.62
Number of promises to mother					.46	.51
Number of promises to teacher						.51
Number of promises to friends						--

$r_{.01} = .325$

$r_{.05} = .25$

TABLE 8

COMPARISONS OF BROKEN AND EXPECTED TO BE KEPT
PROMISES MADE TO AND BY THE CHILDREN

	Social Class			T-Values		
	1 & 2	4	5	1 & 2 vs. 4	4 vs. 5	1 & 2 vs. 5
Broken to	1	0.9	0.8	0.26	0.39	0.59
Standard Dev.	1.9	0.87	1.3			
Expected to	1	1.2	1.45	0.71	0.75	0.75
Standard Dev.	1.9	1.7	1.9			
Broken by	1	0.4	0.75	0.30	0.75	0.88
Standard Dev.	2.6	2.4	2.5			
Expected by	0.15	0.2	0.85	0.08	2.3**	2.7**
Standard Dev.	0.25	0.28	1.1			

$p < .01$**